

Single-pane-of-glass security control with Automated and Assisted proactive and reactive incident response

External Threat Monitoring (watchOUT) Managed Detection and Response (threatNiXD MDR) Secure Applications (appFORT)

Security Operations Center (SOC)

Web App. Assmt. & Pen. Testing (WAPT) Server/Device Vuln. Assmt. & Config. Audit (VACA) Network Pen. Testing (NetPT)

Castellum Labs **Corporate Presentation**



Castellum Labs

New Age Cyber Security Company

Based in Hyderabad, India with global customers

Started by people with decades of product & CySec exp

Value + Impact from Day One, No Installation & No Deployment



Strong Handpicked Team of 50+ with (best of security talent globally)

Subscription Modeled & Globally Delivered CySec Services



Rajeev Shukla, Founder

- 27 years building technology businesses
- Leadership roles in Sun, CA, Quark & more
- Wide experience across US, India and Europe
- Founded Castellum Labs over three years back
- Commercially successful product/service portfolio

Current Customers in

- India
- Australia
- Middle East
- USA
- UK

Current Customer Segment

- SaaS Product Companies
- Financial and Banking
- E-Comm Player
- Telecom
- Retail

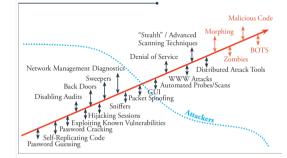
Served Customer in following Areas

- Application Security & Governance
- ISO 27K & GDPR readiness preparation
- Red Teaming. Active Defense Assessment
- Threat Intelligence and Threat Management
- SOC Monitoring (Managed Detection & Response)
- Cloud Security Designing and Cloud Security Governance

Threat Landscape of 2022 is "Different"

Almost all of the attacks use large automated infra

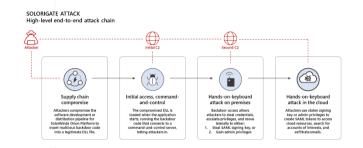
Cyber criminals do not need to be hacking experts Time to exploit a vuln or a misconfigs reducing everyday



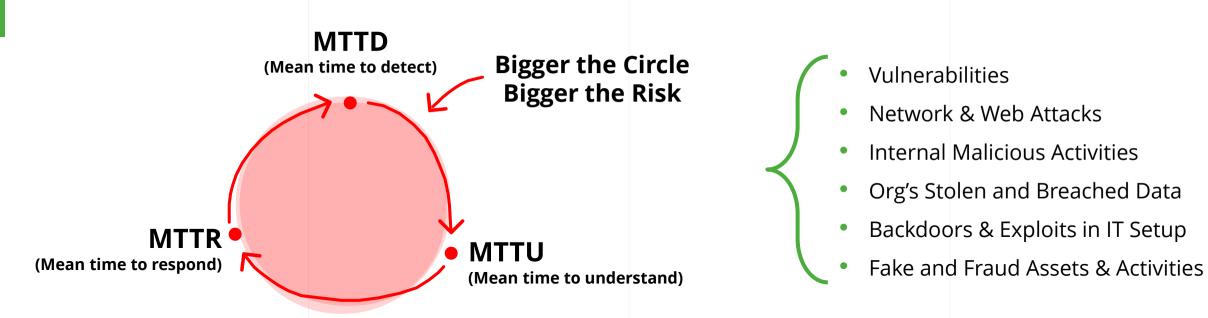
Large scale malicious traffic can be generated through automated infrastructure

Ransomware as a service Exploit code on darkweb Hackers on rental hire It takes mins and hours to get a vulnerability or gap to be exploited, not days/weeks

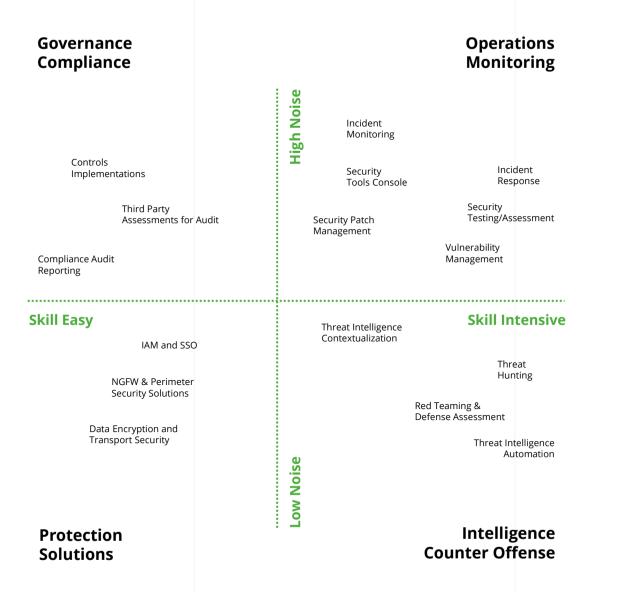




Time to Respond @ Center Stage



Threat Management, is Complex



Near Real Time or Real Time detection and response capabilities are difficult achieve and maintain

Vulnerabilities and defense gaps closure is subjective and is slow because of silos & lack of automation

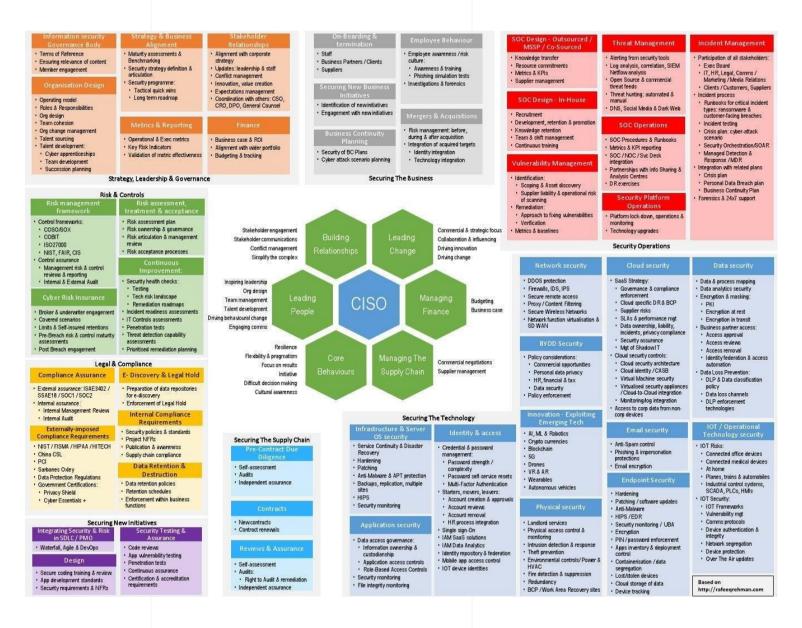
CISOs view of his own org's cyber security is fragmented and incomplete. It also lack a unified perspective

CISO Role 2022

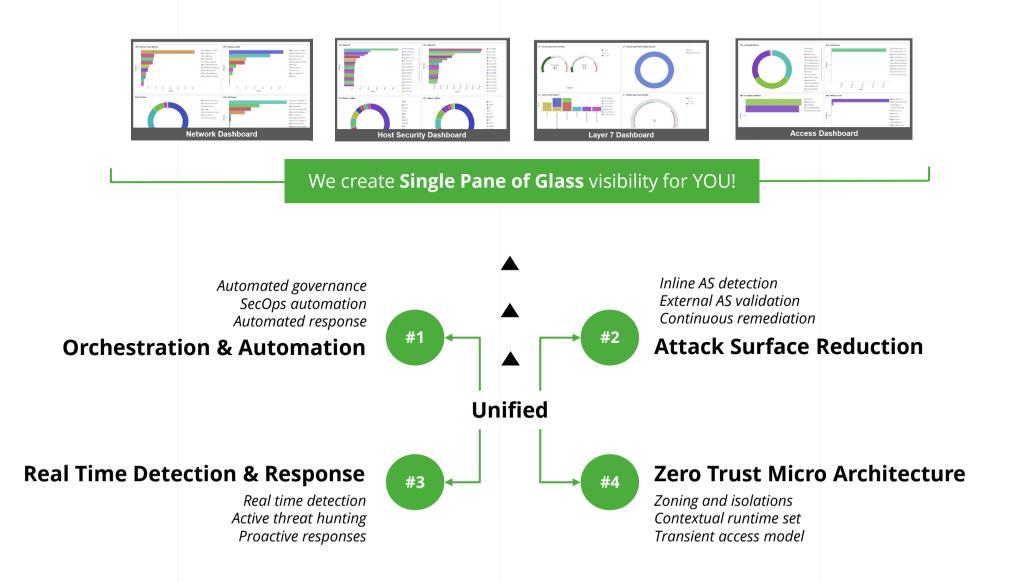
Dealing with dozen of products across spectrum of cyber security

Conflicting priorities leading to clutter and confusion in threat management

Organizational silos and operational challenges creating real time action difficult



CLabs' Vision is "Clarity" & "Defense in Depth"



Castellum Cyber Security Services





Application Security

Managed AppSec Programs

Cloud Security Cloud Security Design & Governance



Threat Intelligence

Intel Enriching, Automation & Hunting



Enterprise Assessments End-to-End Security Assessments



SOC Monitoring

Managed Detection and Response



Vulnerability Management

Enterprise Vulnerability Orchestration



Threat Simulations

Red Teaming & Breach Simulations



Certifications

ISO 27K & GDPR Readiness

Our Technology Platforms



Our SaaS platform for darkweb monitoring, external threat discovery, attack surface mapping & risk management



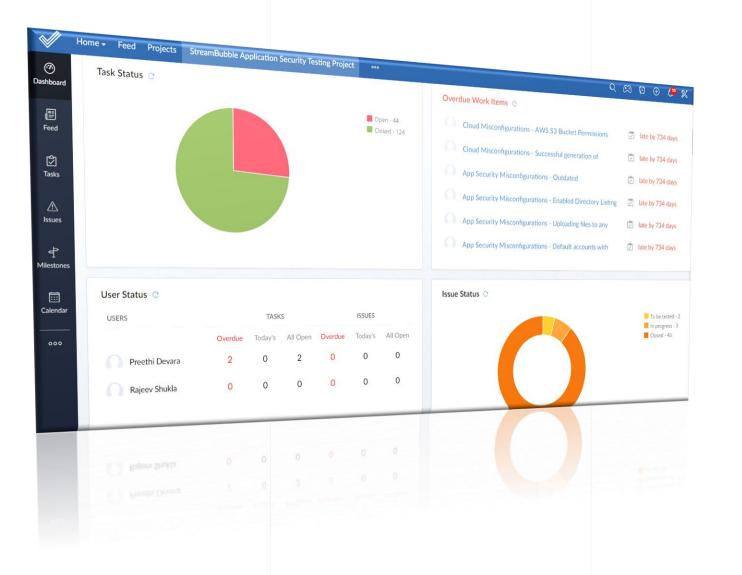
End-to-end SOC platform for 24x7 monitoring, intel application, investigations & response management/coordination



Application security platform we use to create an extraordinary customer experience for web, mobile and API security

"Our engagements, for end-to-end coordination of cyber security are powered by our cloud platforms Our platforms enable cyber orchestration, which can not be achieved with only tools and people An extraordinary experience and a resilient defense is delivered with help of our cutting edge platforms

Unified View <> Single Window

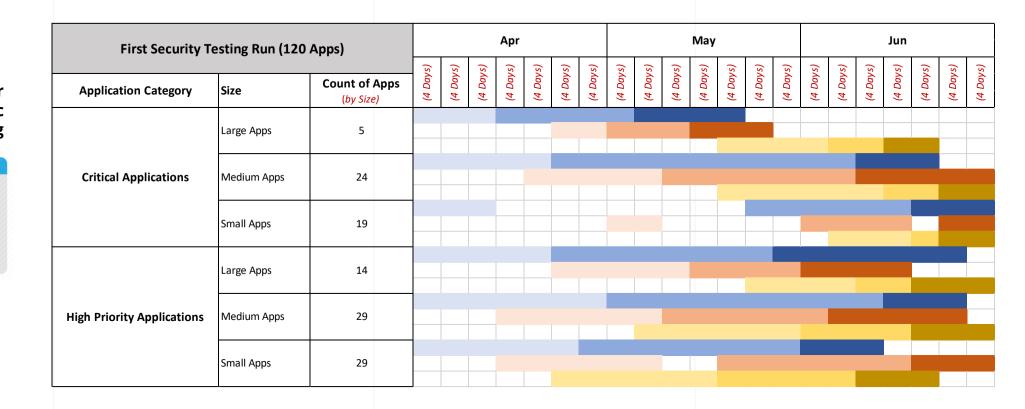


Castellum CySec Engagements

- "One" security portal
- All collaboration on one portal
- All progress maintained at "1" place
- Incredible dashboards and reporting
- Unified security window for customers
- Security document repository for customers

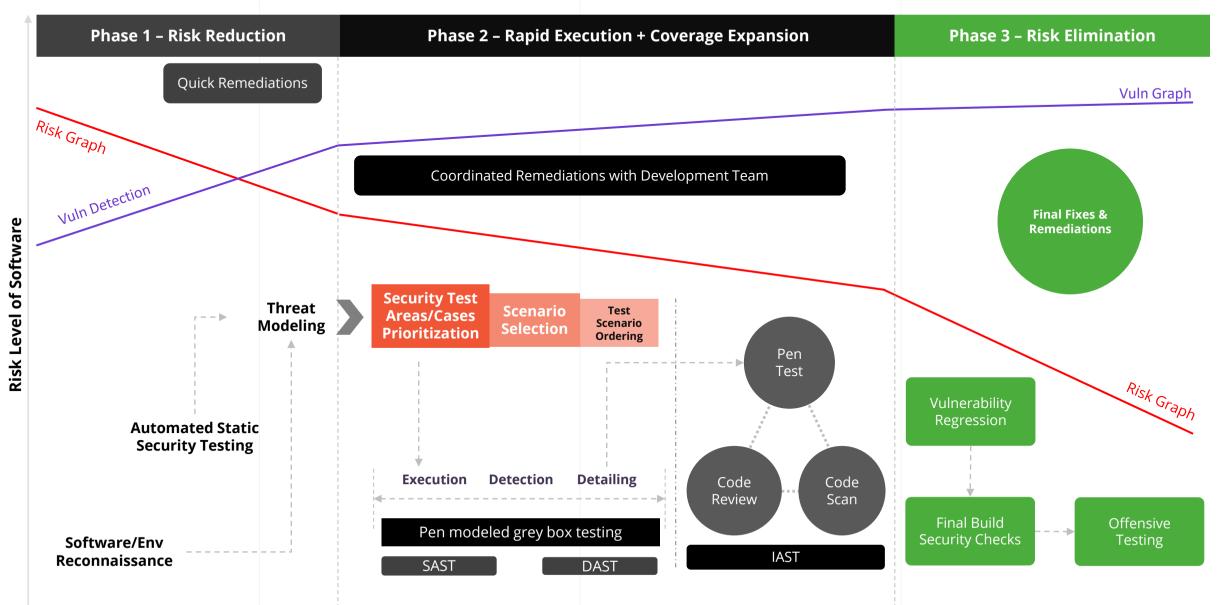
Unmatched Executions Quality

Your CySec Planning



Castellum Labs brings **Program Quality Strength** to Your Cyber Security

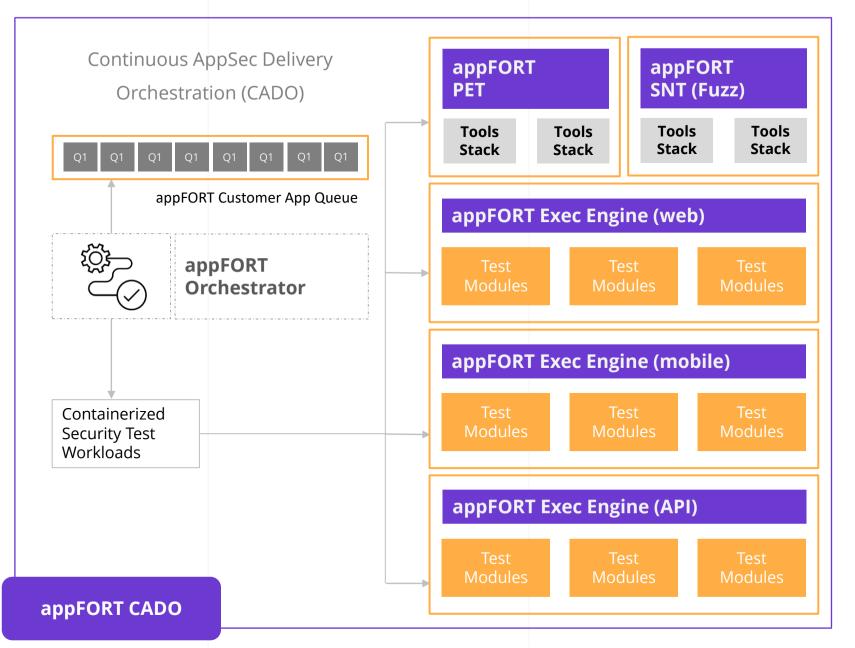
Advanced Cyber Security Frameworks



Our Platforms, Heart of Seamless Orchestration

Cloud based delivery platforms

- For Security Automation
- For Scale Orchestrations
- For Execution Management
- For Continuous Checks/Testing
- For Controls and Posture Mgmt
- For Automated Threat/Risk Analysis



Deep Insights, Dashboards & Analytics

- Set of CISO dashboards

- Built-in insights in all services

- Deep data analytics for risks

- Intel correlations for action

- Human assessment powered

- Realtime on CLabs portal

Ann Cas Dashkasud fan Enterneitas					Level 1 Board			•> Castellum Labs		
AppSec Dashboard for Enterprise				CISO AppSec Summary						
Application Name	Risk Rating Weighted Scale 1 to 10 1 High - 10 Low		SI	tate of Vulneral	bility Levels (Across Major Areas)				Software Surface Ris	k Rating
		Authentication Areas Gaps	User/Role/Access Mgmt Gaps	Session Mgmt Weaknesses	Input Validations	Injection Protections	App Sec Misconfiguration	File Ops/Lib Inclusion	4.6	HIGH
									Enterprise Wide AppSec Posture	
CRM Application	3	Critical	Critical	Medium	Medium	High	Medium	Low	Enterprise white Appset	rosture
Sales Management S/W	3	Critical	Critical	Critical	Critical	High	Medium	Low	Critically Vuln Applications	6
Human Resources Software	3	Low	Critical	High	Medium	Low	Critical	Critical	entically vall Applications	
Supply Chain Software	5	High	Medium	Medium	Low	Low	High	High	Apps with High Exposures	2
CRM Mobile Application	6	Medium	Medium	Low	Medium	Low	Medium	Medium		-
Biometric Attendance Web	8	Medium	Low	Medium	Medium	Medium	Medium	Low	Apps with Moderate Exposure	8
Financial Software	10	Low	Low	Low	Low	Low	Medium	Medium		
Leave Portal	10	Low	Low	Low	Low	Medium	Medium	Low	Secure App Surfaces	1
Cash Management Software	10	Medium	Low	Low	Low	Low	Low	Medium		-
Facility Mgmt Mobile App	9	Medium	Medium	Medium	Medium	Low	Low	Low	Forified Applications	3
Partner API (Treade Platform)	6	High	High	Medium	Medium	Low	Low	Low		
Enterprise Content Portal	3	Critical	Critical	Medium	Medium	High	Medium	Low		
Risk Management Software	3	Critical	Critical	Critical	Critical	High	Medium	Low	Vulnerability Areas with Critical Issues	
Materials Mgmt Movbile App	4	Low	Low	High	High	High	Medium	Medium		
Project Web Site	7	Medium	Medium	Medium	Medium	Low	Medium	Low	Authentication	5
Partner Platform Web	7	Medium	Low	Medium	Low	Medium	Medium	Medium	User/Role/Access	6
Partner Platform Mobile	8	Medium	Medium	Medium	Medium	Low	Medium	Low	Session Management	3
e-Commerce Platform	7	Medium	Low	Medium	Low	Medium	Medium	Medium	Input Validations	3
e-Commerce Mobile App	8	Medium	Medium	Low	Medium	Low	Medium	Low	Misconfigurations	1
Support Platform	3	Critical	Critical	Critical	Critical	High	Medium	Low	File Ops/Lib Inclusion	1





Security as a Service In True Form

Various Platforms

Supported by people in Bangalore, Hyderabad and Pune



Subscription

Available as a subscription or annual contract, with real ROI





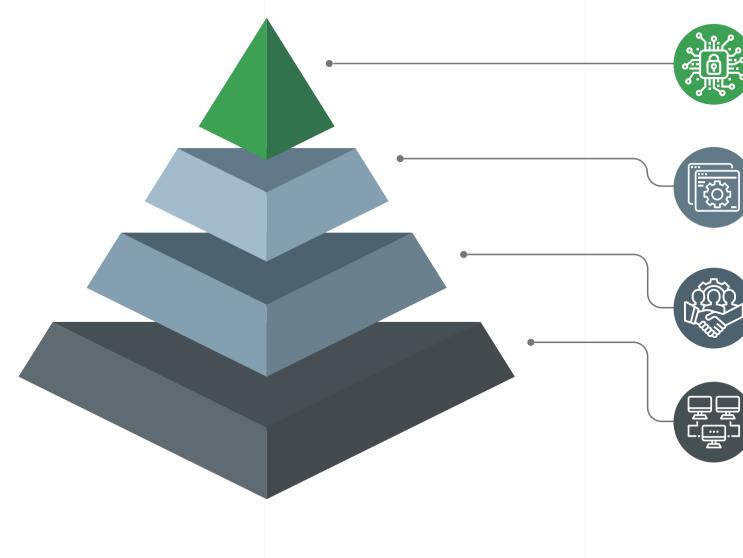
Beyond Reporting

Human assessment, automation and strategic posture shift

Cloud based Labs

All work in our engagement is done from secure cloud labs

Contextual, Progressive & Continuous



Ultimate:

Single-pane-of-glass security control with Automated and Assisted proactive and reactive incident response

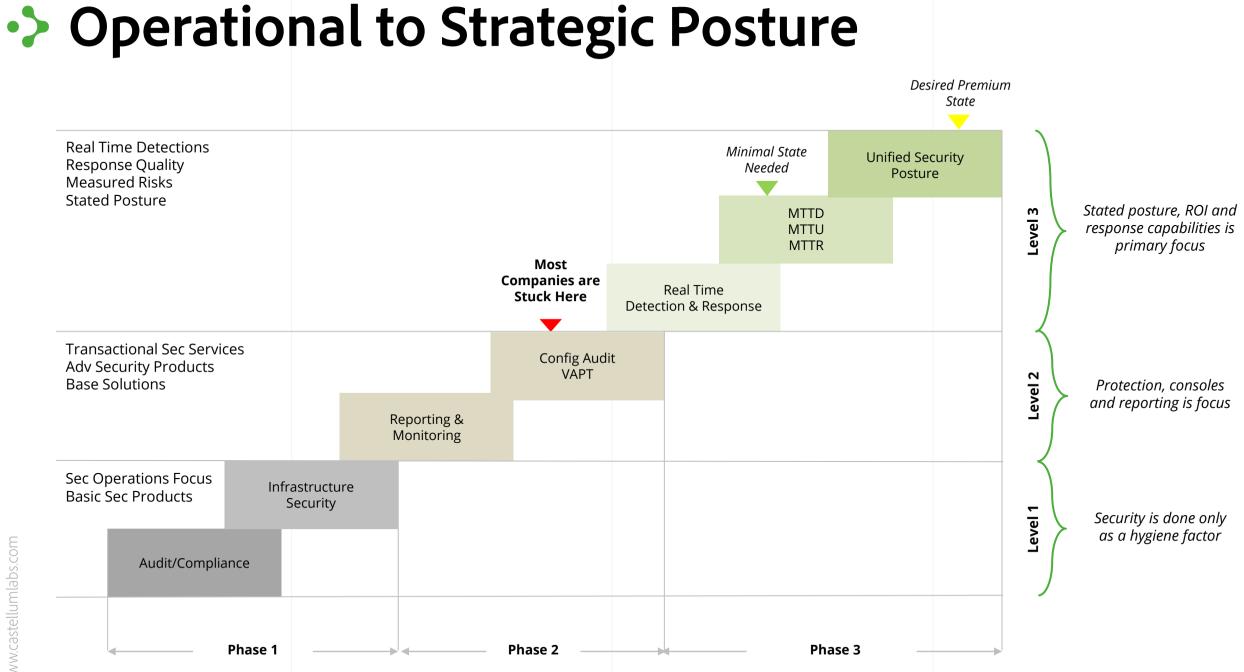
Advanced:

External Threat Monitoring (watchOUT) Managed Detection and Response (threatNiXD MDR) Secure Applications (appFORT)

Recommended: Security Operations Center (SOC) **Red Teaming Incident Response Team**

Essential:

Web App. Assmt. & Pen. Testing (WAPT) Server/Device Vuln. Assmt. & Config. Audit (VACA) Network Pen. Testing (NetPT)



www.castellumlabs.com

Castellum Services Full Portfolio

Application Security

GreyBox s/w security testing Application security design reviews Governance/controls process adoption Frequency based s/w testing annual contract Fully managed AppSec programs for enterprises DevSecOps adoption (managed or BOT modeled)

Cloud Security

Cloud Security Design Cloud penetration testing Cloud access implementation Cloud SecOps and governance Central OPS Center for Cloud security **Vulnerability Management**

Network/web PT

Server configuration audit

Network device config audit

Security patch tracking/rollout

Traffic rule reviews on N/W devices

Enterprise Vulnerability Orchestration

SOC Monitoring

SOC/SIEM technology adoption Eye-on-the-glass monitoring support Layer 3 & 4 supplemental monitoring Incident response support services 24x7 Managed Detection and Response

Castellum Services Full Portfolio

Threat Intelligence

Intel enriching & contextualization Threat intelligence automation Darkweb scanning/hunting Targeted threat hunting watchOUT

Threat Simulations

Red teaming RT for offensive assessment Breach simulations for readiness Periodic assessments for response check

Enterprise Assessments

Security solutions assessment Ent Security process assessment People security readiness assessment Defense assessment through offensive testing SOC assessments for technology, process & response

Certifications Readiness

ISO 27K GDPR HIPPA SOC I / SOC II

Castellum Services Previews





Application Security Managed AppSec Programs **Cloud Security** Cloud Security Design & Governance



Threat Intelligence

Intel Enriching, Automation & Hunting



Enterprise Assessments End-to-End Security Assessments



SOC Monitoring

Managed Detection and Response



Vulnerability Management

Enterprise Vulnerability Orchestration



Threat Simulations

Red Teaming & Breach Simulations



Certifications

ISO 27K & GDPR Readiness

Application Security

Powered by



360-Degree Security

)WASP_™

Penetration Testing (SAST / DAST / IAST)

Software Composition Analysis (Libraries, Open Source Vuln)

Code Scan & Code Review (Manual and Automated Scans)

Design Security Assessment (Selective Security Components)

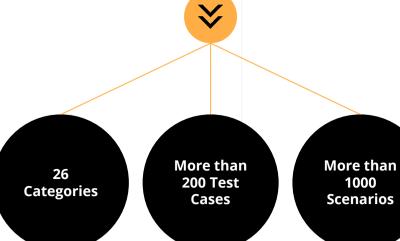
Application Data Security Review (Database & Data Security)

Container and Server Hardening (Config, Vuln & Run Time Hardening)

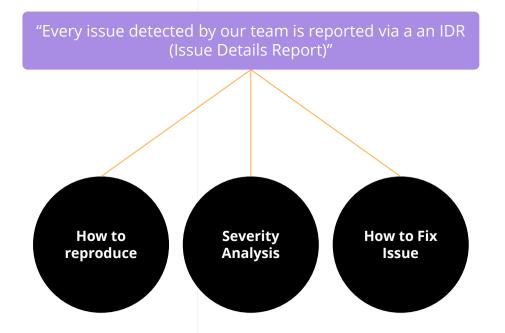
Mobile iOS Android Abstracted Platform HTML 5 & Native Applications

Web Applications Java & .Net Angular JS and Node JS PHP and PHP Frameworks Middleware Frameworks

APIS SOAP XML-RPC JSON-RPC REST



Closure with Complete Remediation



ISSUE 6 - ISSUE 6: Exploiting an Android Backup Issue Basic Information Issue ID NOSL0011/POC/App-Name/M/App001/006 Application Name : App-Name (1.9.0) Vulnerability Type Exploiting an Android Backup Issue Severity CRITICAL Steps to Reproduce Issue 1. To check whether any app allows the backup you need to first reverse the apk ar 2. Check-in AndroidManifest.xml file for the attributeandroid:allowBackup=" true" if this is Present and its value is set to true it means we can backup the app internal data which This looks like a You can easily fill to others to sign.

AppSec Engagement Models



Frequency AppSec Program

Recurrence based Basic Program



Continuous AppSec Program

Release Model based Program Structure Release Vuln Detection Model Security Gate based Controls Limited Remote Automation



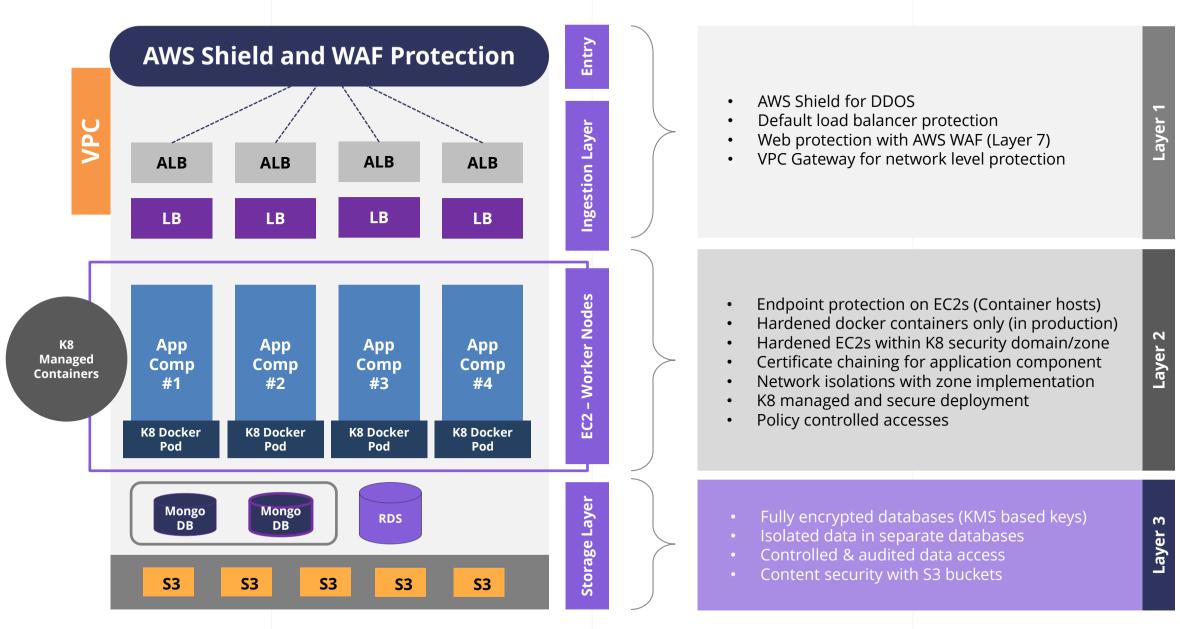
Roadmap to DevSecOps

Continuous Security Program Structure Continuous Vuln Detection Model Security in CI/CD based Controls Detailed Remote Automation Local Sec Tools Integration Realtime Response

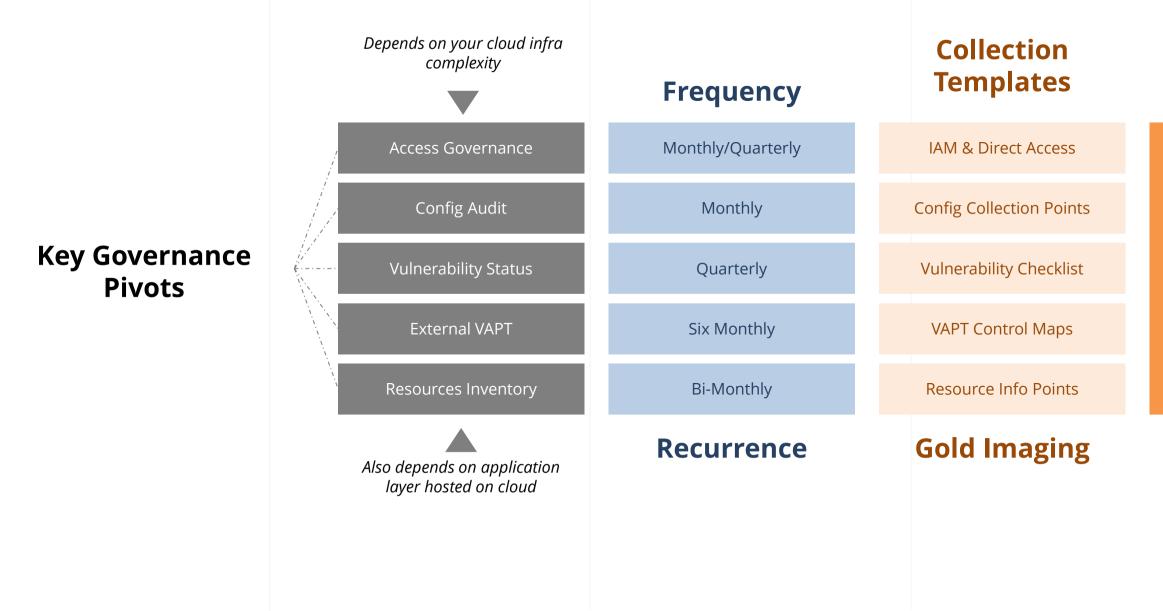
Cloud Security

Reference Blueprint

Cloud Security Design Blueprint



Governance Model for Cloud

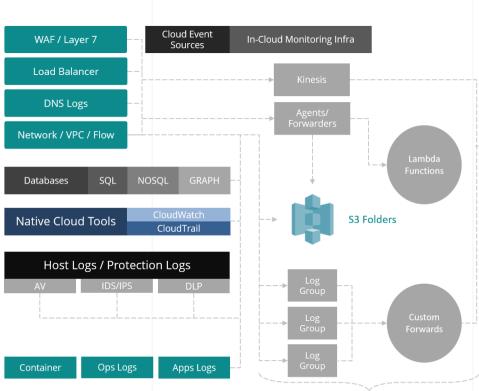


Cloud SecOps Center

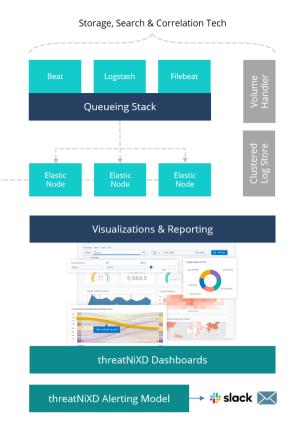
Custom Security Ops Stack

(within your cloud infrastructure)

- Centralized monitoring
- Single place for all SecOps
- Central response coordination
- Centralized cloud security automation
- Secure place for cloud incident Investigations

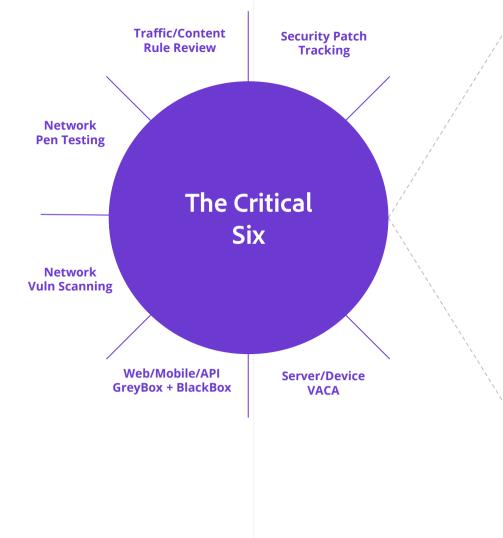


Collection Layer



Enterprise Vulnerability Orchestration

Six Most Critical Elements, Fully Coordinated



- We remotely coordinate six most critical security works
- Detection, assertion, detailing & false positive removal
- Help in prioritization & remediation recommendation
- Tracking the issues reported and closure follow up
- Deep correlations, analytics, insights & reporting

Wheel of Defense

All Critical Six 1. Network Penetration Testing/Assessment

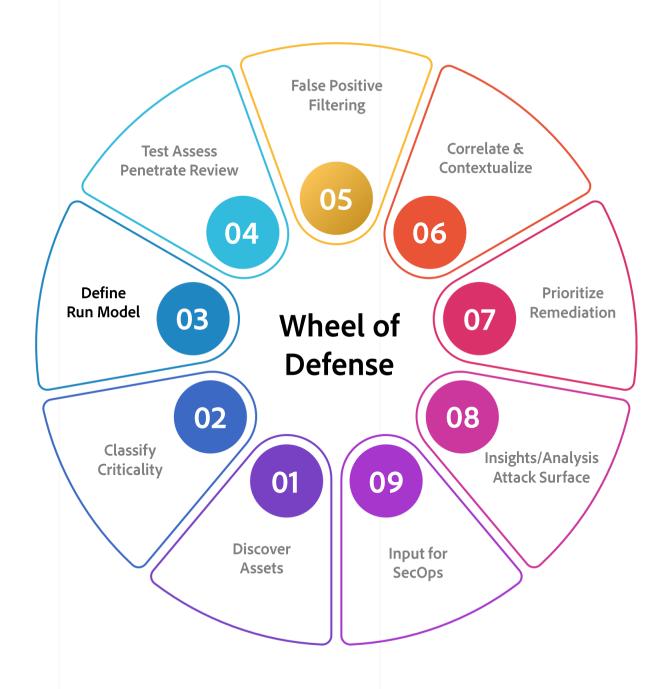
2. Web/Mobile/API GreyBox + BlackBox

3. Server/Device Configuration Analysis

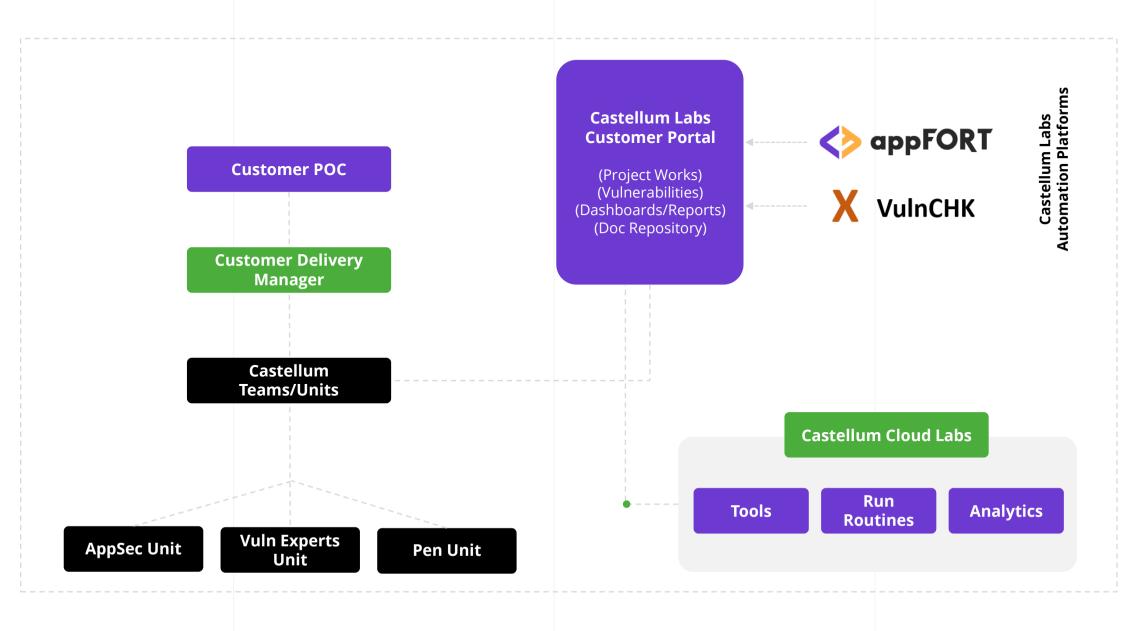
4. Security Patch Monitoring/Tracking

5. Traffic/Content Rule Review

6. Network Vuln Scanning



Automated, Fast & Accurate



True Managed Detection & Response

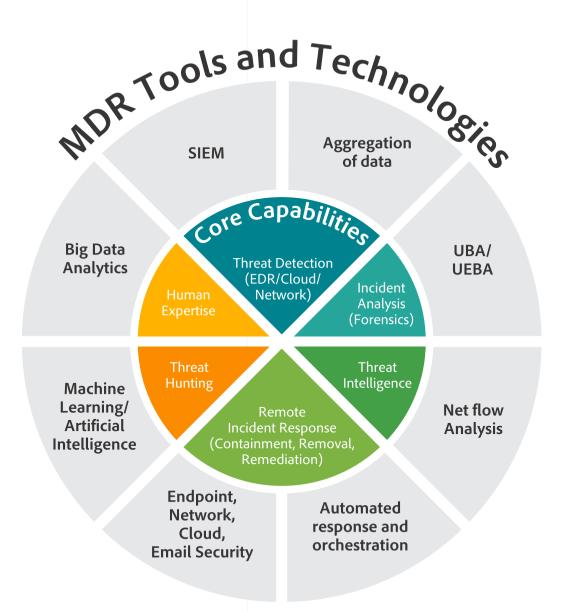
Powered by

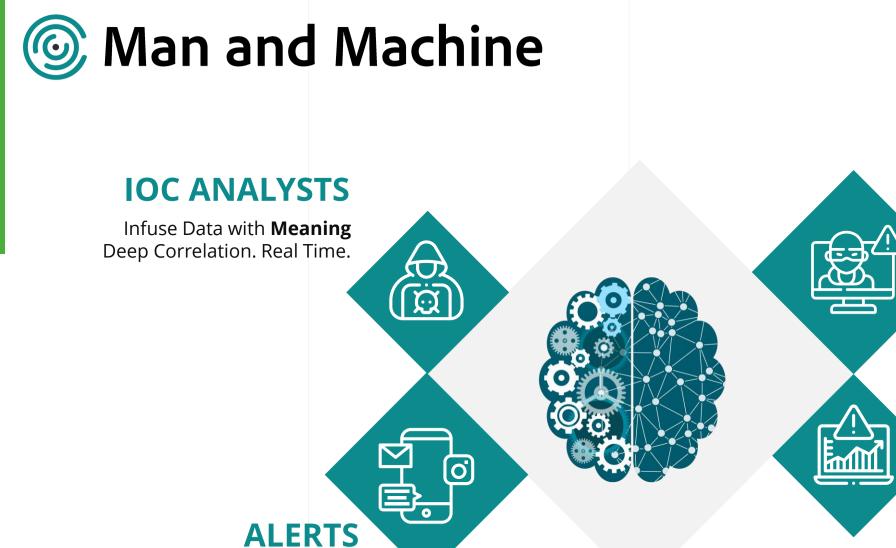




Automation is essential to collate, manage and classify massive amount of data. Yet platforms that rely on automation alone are always playing catch up with threat actors who constantly devise means to avoid automatic detection. We don't keep building obsolete castles with your money:

Human actors, external threat intelligence, threat hunting, manual threat detection, forensics and (what is generally poorly managed) Incident Response – manual and automated – these are our focus areas, since the tools and technologies are already built into our threatNiXD platform.





DATA

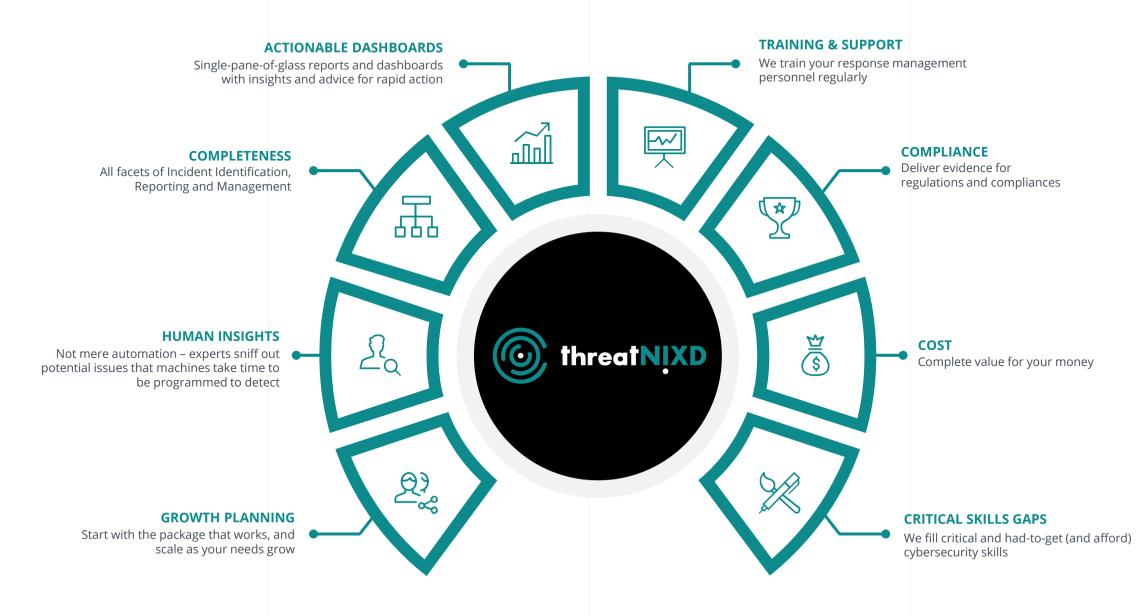
Large Scale Data Collection Redundant. Resilient. Secured.

MONITORING

Centralized Reporting Act. Monitor. Manage. Govern.

False Negatives **Cleaned** MITRE Mapped. Multi-channel.





Secure You Startup (SYS)

Cyber Security, a Challenge for Startups

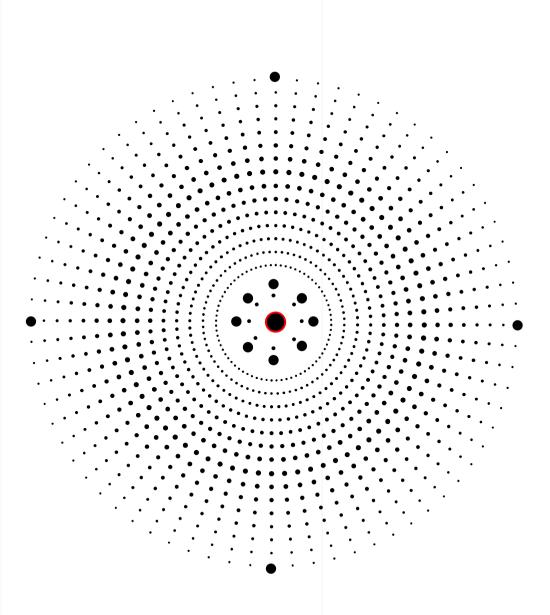


Two fixed points of "Platform Security" in a "Sliding Scale of Priorities"

SYS, Designed to Secure Startups

SYS

Simplified Security for Growth Startups



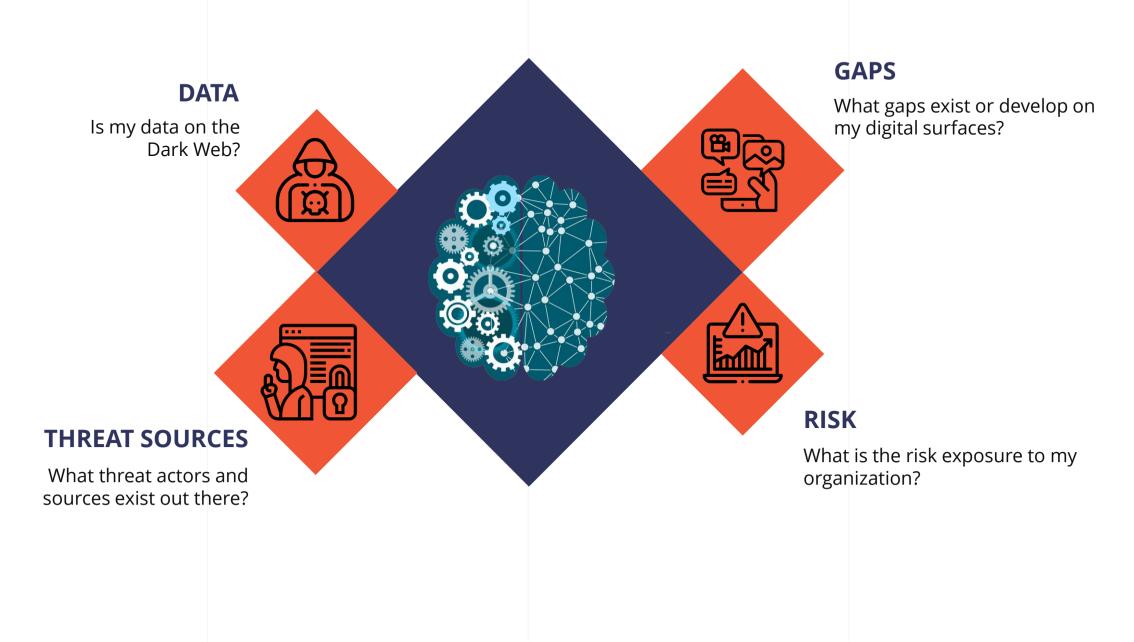
Engagement Models for Startups

Option #1	Option #2	Option #3	Option 4 Complete Assertion Secure Platform + Certification	
GreyBox Good Coverage	WhiteBox Extended Coverage	Full Platform Comprehensive Coverage		
Pen Test	Pen Test + Code Scan + Code Review + Data/Design Review	Pen Test + Code Review + Data/Design Review Server Config Hardening Cloud Security Assessment	Pen Test + Code Review + Data/Design Review Server Config Hardening Cloud Security Assessment ISO 27K and/or GDPR Certification	
10 Days	22 Days	40 Days	60 Days	
Manual + Tools + Platform	Manual + Tools + Platform	Manual + Tools + Platform	Manual + Tools + Platform	
Remote	Remote	Remote	Remote	
	Remediation Suggested	Remediation Suggested	Remediation Suggested	
		S/W Remediation Fix Regressed	All Remediation Fix Regressed	



External Threat Monitoring







Everyday

- We look for Stolen and Sensitive Data across the dark web, GitHub, your web surface
- We look for new Phishing Domains and check Social Media for handles and posts
- We keep a watch for new vulnerabilities due to misconfigurations and exploits
- We locate hacked password on dumps and dark web commerce sites
- We measure and report your threat score as well as how you compare to industry and peers
- We **proactively alert** you on **urgent** findings, out of our reporting schedule

Threat Watch Coverage



Domain Watch Domain/Sub-Domain Enumeration Domain Threat Analysis



Fake/Fraud Watch Monitoring for Fake Sites/Pages Detecting Misuse of Social Accounts



Leak Watch Leakage Detection on Company Web Threat Analysis of Leaked Info



Phish Watch Hunts Phishing Domains Phishing Suspect Analysis



Social Watch Social Surface Inventory for Company Social Surface Check for Company



Attack Surface Watch (Web) Reconnaissance/Scan of Web Surface New Gaps/Vulenerabilities Compilation



Cred Watch Employee Credential Loss Credential Stuffing Risk Analysis



Dark Watch Dark web Monitoring Breach & Stolen Data Detection



Attack Surface Watch (Network) Reconnaissance/Scan of Net Surface New Gaps/Vulenerabilities Compilation



Reputation Watch Blacklists Monitoring Detection of Malicious Content



git Watch git Scan for Code Leakages Threat Analysis of Detected Code



Attack Surface Watch (DNS/Mail) Reconnaissance/Scan of DNS Surface New Gaps/Vulenerabilities Compilation

Partial Customer/Sector List

Name of Customer	Sector	Country	Area of Service
TrucTrace	SaaS Supply Chain	SWEDEN	Application Security
Treasure de altities	Media Platform	DUBAI	Application Security
ChallChald	Retain POS Products	INDIA	Application Security
Decathion	Retail	INDIA	AppSec
Education	Online Learning	INDIA	AppSec
0.07%	Investment Mgmt	India	AppSec
Wpage Diagnostics	Pathology Labs	India	AppSec
	SaaS Platform	Australia	AppSec/Cloud
Star Health	Insurance	INDIA	AppSec/WatchOUT
	Govt	QATAR	Network Security
ierosy felecom	Telecom	υκ	Network Sec / AppSec
Dr. Reddy's Lab	Pharmaceuticals	INDIA	Threat Intelligence
(newindow)	SaaS HR Company	INDIA	WatchOUT

Keep in Touch.

